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ISO/TC 69

CANADIAN DELEGATION REPORT ON ISO/TC 69/SC 6, WG 1 AND WG 4
MEETINGS HELD IN ATLANTA, GA, U.S.A. 1987-09-14/18

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**CANADIAN DELEGATION REPORT ON ISO/TC 69/SC 6, WG 1 AND WG 4
MEETINGS HELD IN ATLANTA, GA, U.S.A.
1987-09-14/18**

by

R. Sutarno*

This report covers the meeting of ISO/TC 69/SC 6 and ISO/TC 69/SC 6/WG 1 and WG 4, held in Atlanta, GA, U.S.A.

This meeting is one of the series of meetings held by these working groups in the course of developing standards for the determination of various aspects of accuracy of test methods.

Keywords: ISO, precision, trueness, standard, test, statistics, harmonization.

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RAPPORT DE LA DÉLÉGATION CANADIENNE SUR LES RÉUNIONS ORGANISÉES
PAR LES GROUPES DE TRAVAIL 1 ET 4, DU SOUS-COMITÉ 6, DU COMITÉ TECHNIQUE 69,
DE L'ORGANISATION INTERNATIONALE DE NORMALISATION (ISO), À ATLANTA, GA, É.-U.
DU 14 AU 18 SEPTEMBRE 1987

par

R. Sutarno*

Ce document comprend un compte rendu de la réunion organisée à Atlanta, GA, É.-U., par les Groupes de travail 1 et 4, du Sous-comité 6, du Comité technique 69, de l'Organisation internationale de normalisation (ISO).

Cette réunion était comprise dans la série de réunions organisées par ces deux groupes de travail à l'occasion de l'élaboration de normes pour déterminer les divers éléments qui influent sur la précision des méthodes d'essai.

Mots clé : ISO (Organisation internationale de normalisation), précision, exactitude, norme, essai, statistique, harmonisation.

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ISO/TC 69/SC 6/WG 4
STATISTICAL ASPECTS OF REFERENCE MATERIALS

4th. Meeting

Place : Ramada Inn Central, Atlanta, GA., U.S.A.
Date : 1987-09-14/15
Present : R. Sutarno (Canada, Convener), M. Carey, G. Schilling
(U.S.A), W.H. Oakland, R. Sym, W. Dennehy (U.K),
K. Graebig (Secretary), Peter T. Wilrich (Germany),
K. Zedeler (Denmark) and T. Miyazu (Japan)

The main purpose of this meeting was to discuss the second draft of the document on the application of certified reference materials for checking the accuracy of measurement procedures (Documents ISO/TC 69/SC 6/WG 4 N3 and N5). These documents were written for incorporation into ISO 5725 Part 4. The first draft was discussed at the London meeting, May 1987.

Convener's report of developments since last meeting.

(1). Document SC 6/WG 1 N19 "Assessment of the trueness of a test method of known precision by the use of certified reference materials" has been redrafted taking into account comments made at the London meeting. This new draft has been circulated as document SC 6/WG 4 N3 "Assessment of the trueness of a standard test method by the use of certified reference materials", May 1987. Only one editorial comment was received from Dr. Colinet of EEC.

(2). As agreed at the London meeting, document SC 6/WG 4 N3 has been combined with document SC 6/WG 1 N31. The combined document has been circulated as document SC 6/WG 4 N5 "ISO 5725 Part 4: Basic method for estimating the trueness of a test method", July 1987.

ISO 5724 Part 4: Basic method for estimating trueness of a test method

Three documents were available for this topic: Document ISO/TC 69/SC 6/WG 4 N3, WG4 N5 and WG 1 N31. It was agreed that document WG 4 N5 would supersede the other two; so only this document was discussed clause by clause. Technically this document was accepted; the changes made were almost exclusively editorial in nature. The convener was requested to incorporate these changes and to submit the document to SC 6 for registration as an ISO/DP (Draft proposal) for voting at Subcommittee level.

Using reference materials for calibration

The subject of using reference materials for calibration was discussed at length. It was agreed that WG 4 should prepare a document on this subject. M. Carey consented to prepare the first working draft to be ready for discussion at the next working group meeting.

The use of reference materials where for a physical reason the homogeneity cannot be assumed

Some reference materials such as alloys are by nature inhomogeneous; although recently developed rapid solidification technique has improved the situation. Theoretically, the procedures described in ISO Guide 33 would not be suitable. Since this is a common problem, WG 4 agreed to study it farther. W. Dennehy consented to do a literature search on the subject and to report to the working group in time for discussion at the next meeting.

ISO/TC 69/SC 6/WG 1 REVISION OF ISO 5725

5th. Meeting

Place : Ramada Inn Central, Atlanta, GA, U.S.A.

Date : 1987-09-15/17

Present : R. Sutarno (Canada), K. Zedeler (Denmark),
W.H. Oakland (Convener), W. Dennehy, Roger Sym (U.K),
K. Graebig, Peter T. Wilrich (Germany), M. Carey,
G. W. Kushnier, R. S. Elder, G.V. Koch (U.S.A.),
T. Miyazu (Japan), Richard H. Albert (AOAC), and
J. F. Church (ISO/TC 28).

The whole meeting was devoted to the discussion of the draft for long term revision of ISO 5725 "Determination of accuracy (trueness and precision) of a test method", with the exception of Part 4 which falls under the responsibility of WG 4.

The following documents were discussed:

Part 1: General principles and definitions. Document ISO/TC 69/SC 6/WG 1 N 59.

Part 2: The basic methods for the determination of two extreme precision measures of a test method. Document ISO/TC 69/SC 6/WG 1 N 64.

Part 3: The basic method for the determination of intermediate precision measure for a test method.

Part 5: Alternative methods for the determination of accuracy of a test method.

Part 6: Application of trueness and precision measures.

Section 1: Calculating repeatability and reproducibility limits and other limits.

Section 2: Stability of results within laboratory

Section 3: Assessment of laboratory

Section 4: Acceptability of results

Section 5: Comparison of test methods

The discussion was both technical and editorial in nature. After the discussion, it was agreed to accept, in principle, the following parts for registration as ISO/DP 5725.

- (1) Part 1, with only minor editorial change.
- (2) Part 2, with minor technical and editorial changes.
- (3) Part 3, with some technical changes to be performed by Japan.
- (4) Part 6, with minor editorial changes to be performed by various originators (Canada, Denmark and Japan).

ISO 5725 Part 5: Alternative methods for the determination of accuracy of a test method

The method for the determination of accuracy of a test method described in parts 2 and 4 of this draft standard is the basic method. There are situations where the basic method is not suitable. For example in the case ore analyses such as those used in TC 102 (Iron ores) and TC 183 (Copper, lead and zinc ores and concentrates), slight modification of the design is necessary in order to take care of the possible inhomogeneity of the test samples. Various documents such as ISO/TC 102/TCR 4 and 5 have been submitted as materials for consideration for this part. G.V. Koch has agreed to coordinate in drafting this part in time for the next WG meeting.

Harmonization with other ISO/TC's as well as with AOAC & IUPAC

Considerable effort has been made for harmonization of statistical procedures used by ISO, IUPAC (International Union for Pure and Applied Chemist) and AOAC (Association of Official Analytical Chemists) as well as internal ISO/TC's. Representatives of AOAC and ISO/TC 28 (Petroleum products and lubricants) attended this meeting to discuss harmonization.

ISO/TC 69/SC 6
MEASUREMENT METHODS AND RESULTS

9th. Meeting

Place : Ramada Inn Central, Atlanta, GA., U.S.A.

Date : 1987-09-17/18

Present : Same as WG 1 & WG 4 attendance

This meeting was a formality meeting for WG 1 and WG 4 to report their activities for the past year. In addition, the status of WG 3 - Measurement uncertainty was discussed. This working group has not made progress since its inception in 1980. The secretariat will request the convener (AFNOR) to call a meeting in the same time and place with the other working groups in order to assess the situation and possibly to recruit more members.

Conclusion and recommendation

This meeting has been one of the most productive meetings of ISO/TC 69/SC 6/WG's. The much needed standard on the determination of accuracy of a test method is on track. This standard is needed by other ISO TC's such as TC 102, TC 17, TC 155, TC 183, TC 28, and TC 34 to name a few, because all these TC's are involved in the development of standards for test methods. Harmonization of ISO 5725 and those procedures used by IUPAC and AOAC will cover a tremendous range of measurement fields.

The interest of Canada in this work is in conjunction with Canada's interest in other product TC's. These TC's require standards and guides produced by both TC 69 and REMCO to function properly. Therefore it is recommended that Canada, as one of the world's main producers and traders of bulk materials (ores, concentrates, wheat etc.), continue to support the work of these committees. Canadian representative at future meetings is imperative.

Items requiring immediate action (all by R. Sutarno):

To revise the draft of ISO 5725 Part 4 for submission to the Secretariat of ISO/TC 69/SC 6 for subsequent circulation and voting as ISO/DP.

Future meeting.

ISO/TC 69/SC 6 including WG 1 and WG 4, plan to meet in Stockholm, Sweden in June 1988.